

REMARKS

This Amendment is filed in response to the Office Action mailed on December 4, 2003. All objections and rejections are respectfully traversed.

Claims 1-12 are in the case.

Claims 6 and 9 were amended to better claim the invention.

At paragraphs 1-2 of the Office Action, claims 1, 7, 8, and 10-12 were rejected under 35 U.S.C. 103(a) as being unpatentable over Lyon et al. U. S. Patent No. 6,333,917 issued December 25, 2001 (hereinafter Lyon) in view of The Admitted Prior Art (page 1-3)

The present invention, as set out in representative claim 1 comprises, in part:

1. A *network device*, comprising:

a first linecard receiving input computer network packets from a computer network, said line card translating said packets into segments;

a switching fabric receiving segments from said linecard, said switching fabric to route said segments to a desired output linecard, said switching fabric having at least one queue therein, said queue having a threshold such that in the event that a segment arrives at said queue and said queue is filled above said threshold, a bit of said segment is set as said segment is passed out of said queue, said bit being set "marking" said segment as that segment having passed through a queue filled above said lower threshold level;

a second line card receiving said segments from said switching fabric, said second linecard translating said segments into a computer network packet for transmission by said second linecard out through a port connected to an output computer network;

a circuit determining whether or not a particular segment of said segments received by said second linecard has said bit set indicating that said segment is marked, and in response to detecting a segment as being marked, discarding said output packet in accordance with a random probability, and in response to detecting that no segment of said output packet is marked, transmitting said output packet onto said computer network.

Lyon discloses a network device which marks packets as a queue fills (Col. 6 lines 35-59) and assigns a "drop tag" at drop/tag section 58 in response to filling of queue 54, or assigns a drop tag at drop/tag section 60 in response to filling of queue 56.

The tag is then returned to a source computer which is transmitting the packets, and the source computer slows its transmission rate in response to receiving the tag.

Applicant's admitted prior art simply describes a network switch which breaks packets into equal length segments for forwarding through a switch fabric, and then re-assembles the segments into a protocol required by the output computer network.

Applicant respectfully urges that Applicant's claimed invention, of:

a first linecard receiving input computer network packets from a computer network, said line card translating said packets into segments;

...

a switching fabric receiving segments from said linecard . . . in the event that a segment arrives at said queue and said queue is filled above said threshold, a bit of said segment is set as said segment is passed out of said queue

...

a second line card receiving said segments from said switching fabric, said second linecard translating said segments into a computer network packet for transmission by said second linecard out through a port connected to an output computer network;

a circuit determining whether or not a particular segment of said segments received by said second linecard has said bit set indicating that said segment is marked, and in response to detecting a segment as being marked, discarding said output packet in accordance with a random probability

Applicant, at Applicant's *network device* breaks packets into equal length segments, *in the event that a segment arrives at said queue and said queue is filled above said threshold, a bit of said segment is set as said segment is passed out of said queue* and then at an output linecard *a circuit determining whether or not a particular segment of said segments received by said second linecard has said bit set indicating that said segment is marked, and in response to detecting a segment as being marked, discarding said output packet in accordance with a random probability.*

Applicant, in sharp contrast to either Lyon or Applicant's admitted prior art, breaks packets into segments, and if a queue of segments fills to high, invokes a random process to decide whether or not to drop the packet.

Lyon simply tags a packet for transfer of the tag back to a source computer. Applicant's admitted prior art simply breaks packets into segments for the convenience of the switch fabric.

Applicant respectfully urges that both Lyon and Applicant's admitted prior art are legally insufficient to render Applicant's claimed invention obvious under 35 U.S.C. 103, either singly or in combination, because of the absence from both Lyon and Applicant's admitted prior art of Applicant's claimed novel *network device* which breaks packets into equal length segments, *in the event that a segment arrives at said queue and said queue is filled above said threshold, a bit of said segment is set as said segment is passed out of said queue* and then at an output linecard *a circuit determining whether or not a particular segment of said segments received by said second linecard has said bit set indicating that said segment is marked, and in response to detecting a segment as being marked, discarding said output packet in accordance with a random probability.*

At paragraph 4 of the Office Action, claims 6 and 9 were indicated to be allowable if written in independent form. Claims 6 and 9 were amended accordingly.

All independent claims are believed to be in condition for allowance.

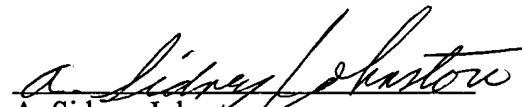
All dependent claims are believed to be dependent from allowable independent claims, and therefore in condition for allowance.

Favorable action is respectfully solicited.

PATENTS
112025-0417
Seq. No. 2230

Please charge any additional fee occasioned by this paper to our Deposit Account
No. 03-1237.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "A. Sidney Johnston", written over a horizontal line.

A. Sidney Johnston
Reg. No. 29,548
CESARI AND MCKENNA, LLP
88 Black Falcon Avenue
Boston, MA 02210-2414
(617) 951-2500